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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/997,778

11/29/2001

Machteld Mertens

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7590

12/03/2003

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EXAMINER

SAMPLE, DAVID R

ART UNIT

PAPER NUMBER

1755

DATE MAILED: 12/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/997,778

Applicant(s)

MERTENS ET AL.

Examiner

David Sample

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-18 and 26-46 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-10, 12 and 13 is/are rejected.
- 7) ☒ Claim(s) 6, 11 and 19-25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Any rejections and/or objections, made in the previous Office Action, and not repeated below, are hereby withdrawn.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

Claims 1-5, 7-10, 12 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Barger et al. (US Patent No. 5,126,308).

Barger et al. discloses a method of making a SAPO-34 molecular sieve in which an aqueous solution of tetraethylammonium hydroxide (a water miscible organic base) is mixed with water and silica sol. See Example 3, column 6. Subsequently, sources of aluminum and phosphorous and aluminum are added and the reaction mixture is heated for a time and temperature sufficient to form SAPO-34. Id.

SAPO-34 has the CHA topology. The reference fails to disclose that other phases are present in the material formed by Example 3. Therefore the claim recitation that the molecular sieve is "pure CHA" is met.

The recitations of claims 2-5, 7-10, 12 and 13 can be found in the reference in Example 3, col's 6-7.

Allowable Subject Matter

Claims 15-18, and 26-46 are allowed. Claims 6, 11, 19-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claim 6, the prior art fails to disclose or suggest forming a SAPO molecular sieve by adding the source of silicon in admixture with a water-miscible organic base wherein the structure-directing agent is a mixture of tetraethylammonium hydroxide and dipropylamine.

As to claims 11, 15 and 19-25, the prior art fails to disclose or suggest a method of making a calcined SAPO molecular sieve which is pure CHA or LEV having a mean particle size of less than 400 nm, or in which at least 50% of the particles are less than 100nm.

As to claim 16-18, the prior art fails to disclose or suggest a calcined crystalline SAPO molecular sieve in which greater than 50% of the particles are less than 100nm.

As to claims 26-33, the prior art fails to disclose or suggest forming a SAPO molecular sieve by adding the source of silicon in admixture with a water-miscible organic base wherein the resultant SAPO molecular sieve has at least 50% of the particles below 100 nm.

As to claims 34-46, the prior art fails to disclose or suggest forming a SAPO molecular sieve by adding the source of silicon in admixture with a water-miscible organic base wherein the silicon source is heated with the water miscible organic base.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Sample whose telephone number is (703)308-3825 until December 23, 2003, and (571)272-1376 thereafter. The examiner can normally be reached on Monday to Thursday and alternate Fridays.

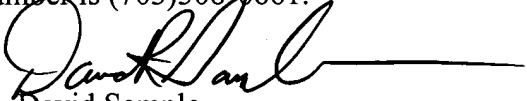
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on (703)308-3823 until December 23, 2003, and (571)272-1362 thereafter. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9310 for regular communications and (703)872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.


David Sample
Primary Examiner
Art Unit 1755

DRS

December 1, 2003